U.S. Pat. App. Ser. No. 10/070,286 Attorney Docket No. 10191/2262 Reply to Final Office Action of 2/24/05

Amendments to the SPECIFICATION:

Without prejudice, please amend the specification (as suggested by the Examiner; no new matter is added) as follows:

Please amend the paragraph beginning at line 28 of page 13 as follows:

--A further important <u>criterion</u> eriterium for the current density established in the first step, which is not necessarily constant, may be that such an electrical current density be applied that suitable openings or pores are formed in silicon substrate 101 directly below uncovered region 103. Openings or pores which subsequently allow an extensively monocrystalline silicon layer, which forms the actual sensor membrane, to be deposited on porous silicon layer 104 formed during the etching procedure may be suitable. Therefore, the openings or pores may only have an adequate size, i.e., an adequate diameter. Openings or pores may have, for example, a diameter of approximately 10 to 100 nm, e.g., approximately 10-30 nm. The foregoing is merely an example of suitable openings or pores.--.

Please amend the paragraph beginning at line 31 of page 15 as follows:

--Such a support layer may, for example, be produced by providing at least the region immediately surrounding silicon layer 104, which is to be porously etched, of the cap area of p-doped silicon substrate 101 with [[-type]] <u>p-type</u> doping. In this manner, "underetching" of silicon substrate 101 in the region of the junctions and/or boundary surfaces between silicon layer 104 and silicon substrate 101 may be largely prevented. Furthermore, care may also be taken that a thin porous silicon layer 104, which forms the starting layer of silicon epitaxial layer 301 or 401 (Figures 3 and 4), is reliably affixed to silicon substrate 101.--.